



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

January 4, 1983

Florida Power and Light Company
ATTN: Dr. R. E. Uhrig, Vice President
Advanced Systems and Technology
P. O. Box 14000
Juno Beach, FL 33408

Gentlemen:

SUBJECT: REPORT NO. 50-389/82-72

This refers to the routine safety inspection conducted by Mr. C. D. Evans of this office on December 13-15, 1982, of activities authorized by NRC Construction Permit No. CPPR-144 for the St. Lucie Unit 2 facility and to the discussion of our findings held with Mr. C. M. Wethy, Plant Manager, at the conclusion of the inspection.

Areas examined during the inspection and our findings are discussed in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspectors.

Within the scope of this inspection, no violations or deviations were disclosed.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC's Public Document Room unless you notify this office, by telephone, within ten days of the date of this letter and submit written application to withhold information contained therein within thirty days of the date of this letter. Such application must be consistent with the requirements of 10 CFR 2.790(b)(1).

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

H. C. Dance, Chief
Project Branch 2
Division of Project and
Resident Programs

Enclosure:
Inspection Report No. 50-389/82-72

cc w/encl:
B. J. Escue, Plant Manager
N. Weems, Assistant QA
Construction Manager

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ATLANTA, GEORGIA 30303

Report No. 50-389/82-72

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33101

Facility Name: St. Lucie Unit 2

Docket No. 50-389

License No. CPPR-194

Inspection at St. Lucie site near Ft. Pierce, FL

Inspector: D. M. Montgomery for 12-30-82
C. D. Evans Date Signed

Approved by: D. M. Montgomery 12-30-82
D. M. Montgomery, Section Chief Date Signed
Operational Program Branch
Division of Engineering and Operational Programs

SUMMARY

Inspection on December 13-15, 1982

Areas Inspected

This routine, unannounced inspection involved sixteen inspector-hours on site in the areas of quality control for radiochemical measurements and liquid and airborne effluent sampling procedures.

Results

Of the two areas inspected, no violations or deviations were identified in two areas.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *C. M. Wethy, Plant Manager
- *R. L. Frechette, Chemistry Supervisor
- *B. W. Kelsey, Senior Chemistry Technician
- *N. G. Roas, Quality Control Supervisor

NRC Resident Inspector

S. Elrod

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on December 15, 1982, with those persons indicated in paragraph 1 above. Licensee representatives agreed to perform the radiochemical analyses referred to in paragraph 8 and report the results to NRC:RII.

3. Unresolved Items

Unresolved items were not identified during this inspection.

4. Program for Quality Control of Radioactive Effluent Measurements

Proposed Technical Specification 6.8.1.i requires that written procedures shall be established, implemented, and maintained for a Quality Assurance Program for effluent monitoring using the guidance in Regulatory Guide 1.21. The inspector reviewed the quality assurance program for effluent monitoring with respect to meeting the general guidance of Regulatory Guide 1.21 covering the following areas:

a. Assignment of Responsibility to Manage QA Program

The responsibility for managing the QA program is assigned to the Chemistry Supervisor.

b. Calibrations

Calibrations of radioanalytical instrumentation are performed using reference standards traceable to the National Bureau of Standards. Procedures have been established specifying the method of calibration:

c. Operating Procedures

The inspector verified that written procedures have been established and implemented for activities involved in effluent monitoring including operation of instrumentation and quality control checks.

The inspector had no further questions regarding this item.

5. Review of Procedures

a. The inspector reviewed the following procedures.

1. 2-C-72, "Processing Gaseous Wastes", 10-12-82.
2. 2-C-62A, "General Atomic Particulate, Iodine, and Gaseous Process Monitor Operation, 10-12-82.
3. 2-C-80, "Determination of Hydrogen Gas in Containment," 7-21-82.
4. C-01, "Schedule for Periodic Tests, 12-13-82.
5. C-02, "Schedule for Test Calibrations, 12-14-82.
6. OP-2-1710020, "Primary Sample System Valve Alignment, 12-8-82.
7. C-42, "Chemical Separation of Strontium and Barium, 10-25-82.
8. 2-C-55A, "Maintaining Reactor Coolant Chemistry," 4-5-82.

The inspector discussed the results of the procedure review with licensee representatives as noted in paragraphs 5b-5c.

- b. Proposed Technical Specification 4.11.1.1.2 requires quarterly post release analyses for Iron-55, Strontium-89, and Strontium 90 of samples composited from batch releases. The inspector noted that the licensee does not have a procedure for radiochemical analysis of Iron-55; and that the present procedure for radiochemical analysis of Strontium-89 and 90 will not meet the required sensitivity of $5.0E-8$ microcuries/cc. Licensee representatives informed the inspector that they intend to obtain technical assistance for the development of analytical procedures for Fe-55, Sr-89 and 90 through their participation in an EPRI sponsored study on the environmental release of Iron-55 and other radionuclides. The inspector stated that radiochemical procedures should be verified for adequacy by testing the procedures with spiked samples. A licensee representative indicated that radiochemical procedures for Fe-55, Sr-89 and Sr-90 should be completed and approved by March 1, 1983. This will be carried as an inspector followup item (50-389/82-72-01).
- c. The inspector determined from discussions with licensee representatives that the charcoal cartridges (Seco 81-70SC-727) to be used for radioiodine sampling are not TEDA impregnated and may not be as efficient for organic radioiodine species. The inspector noted that collection efficiencies for cartridges in use should be tested or documented for radioiodine species actually released or expected to be released. Licensee representatives indicated that they would evaluate this area of concern identified by the inspector. This will be carried as an inspector followup item (50-389/82-72-02).

6. Examination of Airborne Effluent Sampling Devices

Proposed Technical Specification 4.11.2.1.2 requires weekly analysis for principal gamma emitters of particulate filters from gaseous effluent streams. The inspector examined the particulate sampling devices for the process, ventilation, and laundry vents. The inspector noted that the filter medium for particulate collection is a continuous filter strip chart used in conjunction with a gross activity detector for real time measurement of particulate releases. The inspector noted to licensee representatives that the collection method would not provide a weekly sample for analysis by gamma ray spectroscopy. Licensee representatives stated the sampling systems would be modified to allow for collection of weekly particulate samples. This will be carried as inspector followup item (50-389/82-72-03).

7. Examination of the Reactor Coolant Sampling Station

The inspector determined that the reactor coolant sample (RCS) heat exchangers located in the RCS sampling room may present an unnecessary radiation exposure to chemistry technicians collecting daily RCS samples. The RCS heat exchangers are in close proximity to the RCS sampling panel and access door. The inspector was informed that the Unit 1 RCS heat exchangers typically have contact dose rates of greater than 1 rem per hour. Licensee representatives agreed to evaluate corrective measures to shield personnel from the RCS heat exchangers. This will be carried as inspector followup item (50-389/82-72-04).

8. Capability Test

The inspector informed licensee representatives that a simulated liquid sample would be sent to the licensee from the NRC contract laboratory to verify their capability to measure Fe-55, Sr-89, and Sr-90. A licensee representative agreed to perform the analyses and submit the results to NRC:RII. The results of the analyses will be documented in a subsequent inspection report (50-389/82-72-05).